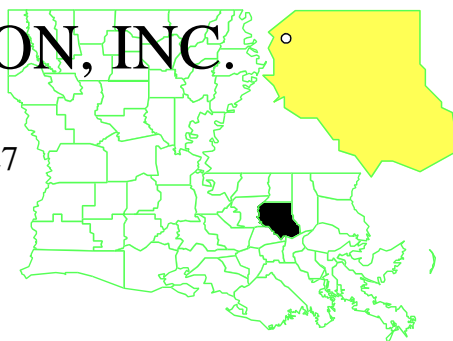


COMBUSTION, INC.

LOUISIANA

EPA ID# LAD072606627

Site ID: 0600472



EPA REGION 6
CONGRESSIONAL
DISTRICT 06
Livingston Parish
Denham Springs

Updated
August 29, 2005

Site Description

Location: Approximately 2 to 3 miles N.E. of Denham Springs, Louisiana, at Milton Road and Burgess Road.

Population: Approximately 1000 to 2000 people live within a 1 mile radius of the site.

Setting: Waste oil recycling operation. The 6.5 acre Pond Area contained 14 interconnected ponds (Ponds A through N) with total surface area of approximately 2.4 acres and an estimated capacity of approximately 4 million gallons. The 2.5-acre Process Area contained 16 aboveground storage tanks (ASTs), a small tanker-truck, 11 underground storage tanks (USTs), a boiler, boiler shed, pump shed, and associated foundations, piping, sumps and containment walls.

Hydrology: Impoundments are in the Pleistocene alluvium.
Discharge to West Colyell Creek which drains into Amite River.

Present Status and Issues

The final Remedial Design Work Plan was submitted on August 15, 2005. The PRPs are currently working on the design documents.

Wastes and Volumes

- The principal pollutants at the Combustion, Inc. Superfund site include Lead, Benzene, Silver, Nickel, PCBs, Toluene, Mercury, Toluenediisocyanate, Chlorinated Solvents and Toluene Diamine.
- The site contained approximately 29,630 drum equivalents of waste oil and sludge.
- Expedited Removal Action addressed principal pollutants at site.

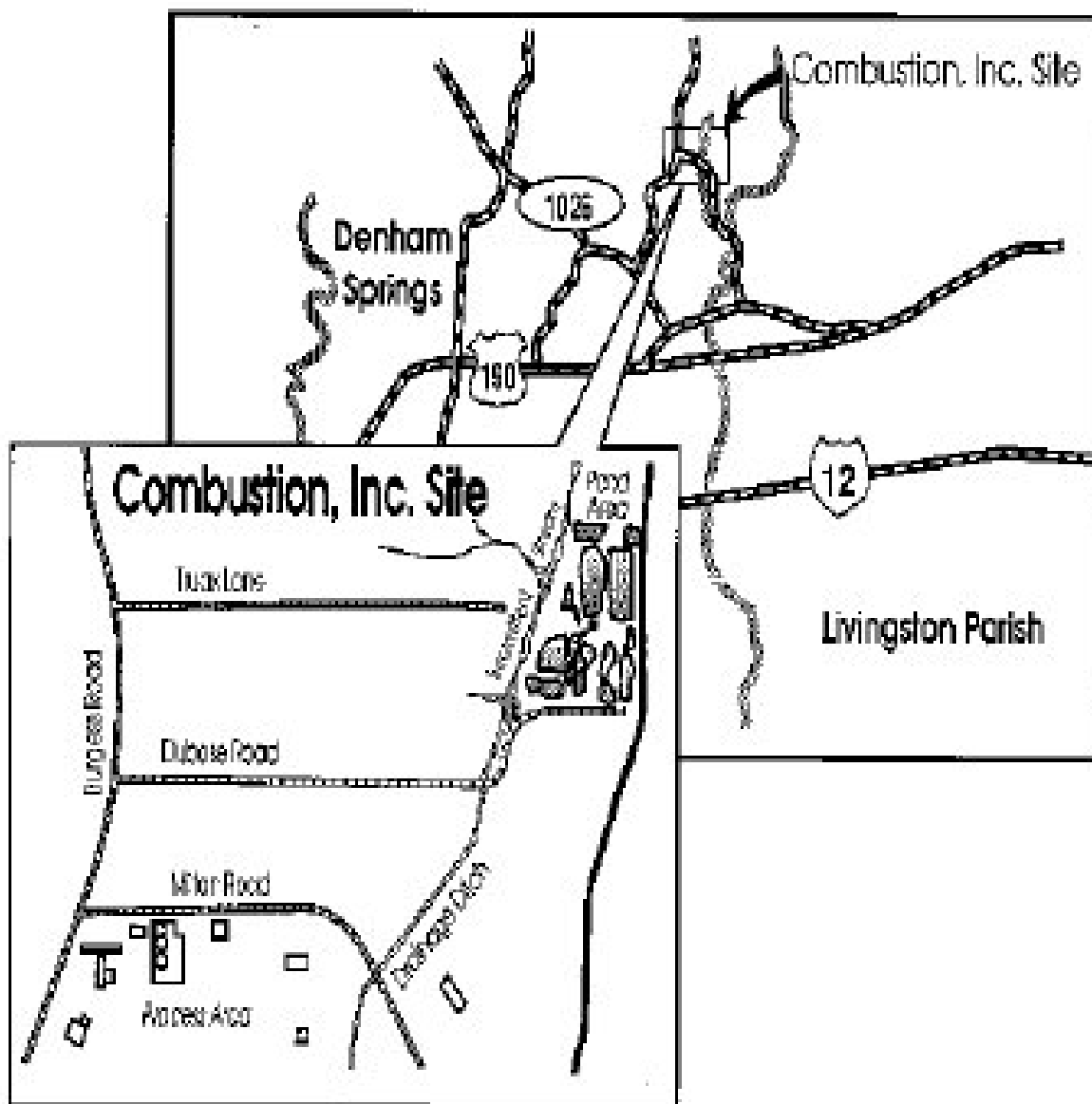
Site Assessment and Ranking

NPL LISTING HISTORY

Site HRS Score: 33.79
Proposed Date: 6/20/86
Reproposed Date: 6/24/88
Final Date: 8/31/90
NPL Update: No. 5 & 7

- Primary ranking factors: presence of airborne contaminants, and shallow ground water contamination with 1,2-Dichloroethane.

Site Map and Diagram



The Remediation Process

Site History:

- Prior to 1982: Operated as waste oil recycling facility; Notices of Violation and Warning Letters issued by the Louisiana Department of Environmental Quality (LDEQ) for various Resource Conservation, and Recovery Act (RCRA) noncompliance.
- Jan. 18, 1984: RCRA Compliance Order issued
- Jan. 7, 1987: LDEQ signs Enforcement Agreement between EPA and LDEQ for State Enforcement Lead.
- Feb. 7, 1987: EPA signs Enforcement Agreement.
- Feb. 16, 1988: Remedial Investigation/Feasibility Study (RI/FS) Work Plan submitted.
- Sept. 27, 1988: RI/FS Agreement signed by PRPs and LDEQ.
- Dec. 1988: RI/FS field investigation activities begin.
- April 1989: RI/FS field investigation activities completed.
- Nov. 7, 1991: RI Report (pre-ERA) completed.
- July 14, 1992: PRP/LDEQ agreement to conduct an Expedited Removal Action (ERA).
- Nov. 1992: PRPs begin ERA to remove oils from the surface impoundments, tanks, and buildings at the site.
- Sept. 1993: ERA field activities completed.
- Nov. 18, 1994: RI/FS (Phase II) Workplan submitted and approved.
- Jan-Mar. 1995: RI/FS (Phase II) field activities conducted.
- Jun. 3, 1996: ERA final report completed.
- Dec. 1, 1997: Final Remedial Investigation Report
- Sept. 1998: Monitored Natural Attenuation Sampling Report
- Feb. 1999: Process Area Vicinity Ground Water Sampling Report
- April 2000: Process Area Vicinity Ground Water Sampling Report
- June 2000: Process Area Vicinity Ground Water Sampling Report
- August 2000: Installation of new ground water monitoring wells.
- January 2001: 3rd and 4th quarter ground water monitoring Reports
- November 2001: Final FS report
- June 5, 2003: The public meeting for the presentation of the Proposed Plan.
- June 23, 2003: Proposed plan comment period ends.
- April 30, 2004: Record of Decision signed by LDEQ
- May 28, 2004: Record of Decision signed by EPA
- March 29, 2005: DEQ and PRP sign a Cooperative Agreement for performance of the RD/RA
- April 2005: Phytoremediation upgrades completed.
- May 2005: Piezometer installation completed.
- July 15, 2005: DEQ conditional approval of Remedial Design Work Plan

Health Considerations:

- Expedited Removal Action which occurred in 1992 and 1993 reduced the threat of exposure from the site to area residents.
- Air monitoring during the removal was done to regulate emissions from the site.
- Preliminary Public Health Evaluation and Endangerment Assessment submitted to LDEQ and to EPA on February 16, 1990.
- Health Consultation Assessment of Cancer Incidence from the Louisiana Tumor Registry from 1988-1997 submitted by the Louisiana Department of Health on March 17, 2005.

Record of Decision

The Record of Decision was signed by LDEQ on April 30, 2004, and by EPA on May 28, 2004. The selected remedy is Phytoremediation Plus Monitored Natural Attenuation.

The major elements of the remedy include:

- Phytoremediation, as an enhancement to the natural attenuation, will provide additional controls to prevent further lateral migration of contaminants in the ground water. The phytoremediation will include planting and maintenance of trees in a manner designed to inhibit movement of ground water contaminants toward the downgradient perimeter of the contamination and to degrade contaminants within the plume. Establishment of the trees is expected to require two years. Once the trees have been properly established, phytoremediation will be primarily a passive remediation. The Remedial Design will specify tree species, planting density, and planting procedures.
- Ground water in the upper and lower water-bearing zones in the vicinity of the former Process Area will be monitored for volatile organic compounds and 2,4/2,6-toluenediamine (TDA)-related compounds. Ground water analyses have led to the selection of two compounds as tracking constituents. 1,2-dichloroethane (EDC) has been selected as the tracking constituent for the volatile organic compounds (VOCs), while 2,4/2,6-TDA has been selected as the tracking constituent for the aromatic amine compounds. The behavior of these compounds should be indicative of the behavior of other similar compounds at the site.
- Natural attenuation of the ground water will also be evaluated using biogeochemical monitoring prior to each Five Year Review. Fate and transport modeling of the TDA and EDC plumes will also be performed prior to the Five Year Review.
- Ground water in Zone 1 and Zone 2 in the vicinity of the former Pond area will be monitored for volatile organic compounds. This ground water monitoring program was presented in Appendix D of the Feasibility Study (URS, 2001).
- Appendix E of the Feasibility Study (URS, 2001) is a Site Long-Term Care Plan which provides a framework for site upkeep during the remedial action.

- Hot-spot treatment is selected as the contingency remedy to provide additional treatment in the more highly contaminated areas of the ground water plume should the selected remedy fail to meet the specified criteria when evaluated during the first Five Year review. The aromatic amines will be treated utilizing hydrogen peroxide and an iron catalyst and the chlorinated alkanes will be treated utilizing a hydrogen releasing compound.
- Institutional controls (ICs) in the form of conveyance notices to inform the public of Site conditions and restrictions will be required for the pond area soils and the pond and process area ground water. This IC will be enforced and monitored by LDEQ in accordance-with La. Rev. Stat. Aim. § 30:2039 (2000) and La. Admin. Code tit. 33 § 3525 (1999), which will require the owner(s) of the facility property to record a notice in the mortgage and conveyance records of Livingston Parish.

Community Involvement

- Outreach activities are the responsibility of LDEQ
- Community Involvement Plan: Developed 6/89
- Open houses and workshops: 9/90, 9/91, 7/92, and 5/94
- Public Meeting for Proposed Plan: 6/03
- Milestone Fact Sheets: 4/89, 8/90, 2/91, 9/91, and 5/94
- Citizens on site mailing list: 36
- Constituency Interest: Citizens supportive of EPA efforts.
- Site Repository: Livingston Parish Library, Denham Springs/Walker Branch, 10095 Florida Boulevard, Denham Springs, LA 70726

Technical Assistance Grant

- Availability Notice: 5/9/89
- Letters of Intent Received: None
- Final Application Received: N/A
- Grant Award: N/A

Contact Information

Remedial Project Manager:	Katrina Higgins-Coltrain	214-665-8143 or 1-800-533-3508
State Project Manager:	Todd Thibodeaux	225-219-3225
Community Involvement:	Katrina Higgins-Coltrain	214-665-8143 or 1-800-533-3508
Attorney:	Barbara Nann	214-665-2157 or 1-800-533-3508
Prime Contractor:	URS Consultants	
Prime Oversight Contractor:	None	
EPA Regional Public Liaison:	Arnold Ondarza	1-800-533-3508, EPA (6SF)

Enforcement

EPA/State enforcement agreement signed February 9, 1987, gives the State of Louisiana, through the LDEQ, the enforcement lead on all site activities.

The State and the potentially responsible parties signed a Cooperative Agreement on March 29, 2005, for the performance of the remedial design and remedial action.

Benefits

Expedited Removal Action

- Approximately 25,700 tons of soil and 2,000 tons of debris and foundation materials were excavated and disposed of off site.
- Approximately 8,000 tons of solidified sludge and paraffin and approximately 3,400 linear feet of pipeline were excavated and disposed of off site.
- Approximately 58,086 gallons of oil was sent off site for energy recovery.
- 18 above ground and 12 underground storage tanks were emptied of contents, dismantled, and recycled.
- Approximately 11.3 million gallons of wastewater was treated and discharged.
- Expedited Removal Action eliminated exposure potential and allows for future development of the property.